My first power tool

A few years ago, my husband Ray lost his old, rusty, blue 1972 Chevy truck in a head-on collision in Mexico. He replaced it with another 1972 Chevy truck, but this time he bought a shiny, red, restored one. Then he saved some money by buying a used, oxidized, dirty, badly-weathered Leer camper shell to cover the truck bed. The camper shell was *sort of* red -- once-upon-a-time red -- but looked like it was coated with a thick layer of chalk and dirt. I thought it was a shame that his truck was restored so nicely, so red and shiny, yet the camper shell was such an eyesore. So I decided to restore it for him.

I read all about restoring and detailing cars and fiberglass. Many raved about a random-orbital polishing machine, the Porter Cable 7446, and its bigger brother, the 7336. Wood finishers love the sanding abilities of this random-orbital, too. With refinishing projects galore on my Projects list, I invested in the 97336 with the dust collection system, so that I can use it for furniture and cabinet projects too.

In April, Ray and I had to remove the camper shell so that we could use the truck to move a refrigerator (another story altogether). It was a *huge* job getting that shell off the truck. Clearly, with the camper shell on the garage floor where I could actually reach it, here was my opportunity to go at it with the Porter Cable.

So on May 30, 2005, Memorial Day Monday, I gathered my products and equipment. We moved the camper shell out of the garage. I began the lengthy restoration process by washing the camper shell with Dawn, which is recommended for removing grease and dirt. (In retrospect, since the gel coat is so porous, I think I should have used a stronger solvent like acetone as well.) Then I dried the camper shell thoroughly with white cotton terry towels. Our water is so hard that it quickly creates mineral-deposit spots, so drying is a *pain*.

Cleaning and drying was kind of a "pre-step." Now I was ready for this 3-step restoring process:

1. **Compound** with a heavy-duty abrasive product and wool compounding pad, to remove the oxidized layer of gel coat.
2. **Polish** with a very fine abrasive and foam polishing pad, to remove the fine swirl marks from the heavy abrasive in Step 1 and further bring up the shine.
3. **Protect** with a polymer sealant. The polymer is supposed to screen the sun's damaging UV rays and create a slick surface that helps water, dirt, pollution, and bird poop to slide off easily before they can etch the surface too badly. At least, I *hope* the polymer will do this. We sure do get a lot of bird poop around here.

Step 1. I masked off the black trim with 3M painter's blue masking tape. Then I put a wool polishing pad on the 7336, applied some 3M Super Duty Marine Rubbing Compound to a section of the camper shell, and turned that baby on. I started tentatively with the lowest speed. Soon, however, I found I got the best results by turning the speed up to 5 -- 6 is the maximum -- and really bearing down with my weight, holding the thing firmly with both hands. I think using speed 6 would have been even better for this heavy oxidation, but it was just too hard for me to hold on to it at that speed.

After one pass over the entire top, it looked amazingly better. It actually looked **red!**

However, my technique had rapidly improved as I had gone from section to section, so I decided to make another pass with the heavy-duty compound. I had learned that the wool pad clogged quickly, so after each 2' X 2' square section I compounded, I dug the residue out of the wool with a brass-bristled grout brush. I went over the whole camper shell again, and sure enough, it looked dramatically better still.

By this time, my back was exhausted. It was hard for me to reach the middle; I had to extend my arms and back fully to get to it. Completing this first step was like doing the Ab Wheel exercise for 4 hours straight. Even though I wore my old Valeo lifting belt to support my previously-injured back, I couldn't even stand up straight at the end of the day.

By this time, I wanted to go on to **Step 2** -- polishing with a finer polish and foam polishing pad to remove the fine swirl marks created by the heavy-duty compound. The heavy-duty compound of Step 1 could be used in the sun (the directions didn't say not to, and it seemed to work fine), but the Finesse-It II polish instructions say *not* to use it in direct sunlight or on a hot surface. By late afternoon on Memorial Day, it was sunny and the camper shell was hot. I tried the polish anyway, but it dried quickly and unevenly, smearing badly. So I had to wait for another day.

On Saturday, I got out there again with the machine and the Finesse-It II Marine Polish. I still had a lot of trouble with this polish smearing, even in the shade. The Step 1 compound had been more work to move around the shell, because of the coarser abrasive and rougher surface, but this polish was just much more difficult to work *evenly*. I would not want to use this product again. I found I had to rub the product off with microfiber and rubbing alcohol to get an evenly-shiny finish. It was a pain, but after polishing for awhile, the camper shell looked like red glass.

Now on to **Step 3**. I decided to apply a long-lasting polymer sealant rather than a carnauba-type wax, because the synthetic polymers last much longer. I wanted the longest-lasting protection possible for this camper shell that bakes in the California sun all day long. Obviously, I do not want to be doing any more work on this camper shell any time soon -- preferably *never again*! So I applied Zaino, a synthetic polymer I had learned about on the Roadfly Detailers Forum. I had purchased the Zaino products from Robyn Emus, one of the wonderfully-helpful owners of LAZaino.

Zaino is a bit more *involved* to apply than wax. Not more *difficult*, but there are some mixing and waiting involved. So first, I mixed Z5, which is supposed to fill swirl marks a bit, with ZFX, which makes the polymer cure faster. I then waited 10-15 minutes for the Z5 and ZFX to mix/bond/whatever it is they do. Zaino does not bond to oil, so because the compound and polish I used in Steps 1 & 2 contain oil, I had to wash the camper shell with Dawn and dry with towels *again*. I then rubbed on a *thin*, ***thin*** coat of Zaino, waited awhile, and buffed it off with a microfiber cloth. I repeated this procedure 2 more times for a total of 3 coats, the most Zaino that can be applied in one day.

Zaino had better last just as long as everyone says: I do not want to do this again any time soon!

By this time, the camper shell top looked absolutely *awesome*.

See a slideshow of these pictures and more at my website:
http://doc.ece.uci.edu/~anderson/pics/CamperShell

With the help of our wonderful neighbors, we lifted the camper shell back onto the truck, and Ray bolted it on. Now I had to do the same 3-step procedure to the sides. (I had decided it would be easier to do those areas with the shell on the truck, so I wouldn't have to bend over to do them.)

There it is -- 3 half-days of hard work, and this camper shell looks like new. Probably better than new!

The Porter Cable 7336 is a terrific little machine. I'm going to be abrading *lots* of surfaces with this puppy. I love my first power tool!